

IN THE SPECIFICATION

Please amend the paragraph on page 4, lines 15-31, as follows:

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At station 170, the wafer is moved in the end effector to cause the center of the wafer to coincide with the center of the end effector (we will refer to this stage as "XY positioning"). Then the wafer is rotated in the end effector to align the wafer rotationally. The XY positioning involves techniques similar to those described in U.S. patent application no. 09/904,700 ~~attorney docket no. M-11881~~ US, entitled "Article Holders and Article Positioning Methods", filed by A. J. Berger and F. E. Kretz on July 13, 2001 ~~the same day as the present application~~ and incorporated herein by reference. The XY positioning involves the robot pushing the wafer against an object or objects. The wafer slides on pads 340 without the end effector losing hold of the wafer. One embodiment is illustrated in FIGS. 6-9. FIG. 6 is a perspective view, and FIGS. 7-9 are top views. Here the objects against which the wafer is pushed are two sets of vertical pins. One set of pins consists of pins 510.1, 510.2, 510.3, 510.4 ("pins 510"). The other set consists of pins 520.1, 520.2, 520.3, 520.4 ("pins 520"). Pins 510, 520 are mounted on a support plate 530. Pins 510 are positioned along a circle 540 (FIG. 7) of the same radius as wafer 120. Pins 520 are positioned along a circle 550 of the same radius as wafer 120. Pins 510.1, 510.2 are symmetric to pins 510.4, 510.3 with respect to a horizontal axis 560. Pins 520.1, 520.2 are symmetric to pins 520.4, 520.3 with respect to the same axis 560.

Please amend the paragraph on page 6, lines 10-17, as follows:

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The invention is not limited to any particular number of pins 510, 520, or their positioning. The pins do not have to be positioned symmetrically with respect to any axis. Also, article 120 and end effector 130 do not have to be round or symmetric. The pins can be replaced by other objects, vertical or otherwise, as described in the aforementioned U.S. patent application ~~attorney docket~~ no. 09/904,700 ~~M-11881~~. Either pins 510 or pins 520 can be omitted in some embodiments. The invention is not limited to any particular positioning of pins 510, 520, motor 610 or sensor 630 relative to each other. The sensor may be positioned close to the motor, below the motor for example.